Office of Water Template Language
Technical Specifications and Redundancy Minimization

The following text is a starting point for language for contracts, ICRs, and direct field activities that require adherence to agency technical standards and minimization of redundancy in development of information resources. This text may need to be modified for specific contracts and ICRs. Questions on modifying this text should be referred to the OW Senior Resource Information Management Officer, Andy Battin.

EPA Information Technology Architecture Road Map

Adherence to EPA technical specifications will ensure that information resources can be integrated with the Agency information architecture. Agency technical specifications are listed in the Information Technology Architecture Road Map (ITARM) [http://basin.rtpnc.epa.gov/ntsd/ITARoadMap.nsf]

- EPA's Information Technology Architecture (ITA) Road Map is an organized collection of products and technologies that define the standards and guidelines supporting the technical design of Agency information systems. The ITA Road Map establishes the Agency's information technology portfolio. This portfolio is required of all executive agencies under the Information Technology Management Reform Act (ITMRA) of 1996 (Division E of Public Law 104-106). The ITA Road Map provides the framework in which Agency applications are developed. The ITA Road Map (or simply the "Road Map"), forms the basis for the selection and deployment of supporting computing platforms and network connectivity between computing platforms, as well as the systems software and related products that interconnect computing platforms and make them operate.

- The ITA Road Map is organized into the following sections:

  - Executive Summary: An overview of the ITA Road Map and it's purpose.

  - Understanding the Road Map: Learn about the purpose and benefits of using the ITA Road Map, who should use it, and how it is maintained. View the model upon which the Road Map is developed, definitions that apply to various hardware platforms, and finally how your input can guide future decision making.

  - Updates: View ITA Road Map updates as well as the recommended desktop PC configuration.

  - Developers' Center: Determine which ITA products, technologies, network connectivity, etc. are appropriate for your planned Agency project.

- IT Security: Learn how EPA is currently addressing the key issue of security via its Information Technology Architecture.

- Application Deployment: By completing this Checklist, application developers communicate with NTSD and ensure sufficient resources and support for their application.

- Product/Technology Database: Research all IT components addressed by EPA by software category, by product/technology name, by hardware platform, or by specific software type. This section has extensive drill-down capabilities to satisfy the most detailed inquiry.

- ITA Product Support: Learn how the National Technology Services Division (NTSD) of EPA provides support and assistance for your information technology needs through Working Capital Fund (WCF).

- Platform Connectivity: View definitions of all Agency-approved platforms and access diagrams of Agency communications connectivity for each approved computing platform.

- Directions and Initiatives: Learn about specific Agency initiatives including:

  - Strategic Directions
  - Server Services
  - Network Services
  - Software Components
  - Application Environments/Directions
  - Year 2000 Compliance
  - Training and Human Resource Development

Detailed information on all of the above topics and more is available at http://basin.rtpnc.epa.gov/ntsd/ITARoadMap.nsf

The Agency IRM Policy Manual 2100 Series (2100-2199) of the Agency's Directive System contains the majority of the Agency's IRM policies, standards and procedures [http://www.epa.gov/irmpoli8/polman]. This manual establishes a policy framework for the Information Resources Management (IRM) Program in the U.S. Environmental Protection Agency (EPA) (also referred to as the Agency). Information Resources Management means planning, budgeting, organizing, directing, training and controlling information. It encompasses both information itself and related resources such as personnel, equipment, funds and technology. This document is intended to provide EPA with a structure for the implementation of the Brooks Act of 1965, of 1974, the Freedom of Information Act of 1966, as amended in 1974 and 1986, the Federal Records Management Amendments of 1976 and policies and regulations issued by the Office of Management and Budget (OMB) and the General Services Administration (GSA), the two primary oversight agencies for Federal IRM programs.

Environmental Information Management System

EPA's Office of Research and Development (ORD) has developed a scientific environmental information management system (EIMS) that stores, manages, and delivers descriptive information (metadata) for data sets, databases, documents, models, multimedia, projects, and spatial information. The EIMS user community includes environmental scientists, resource managers, and other stakeholders -- both within EPA and from the general public. Partners from ORD's Regional Vulnerability Assessment (ReVA) project, the National Center for Environmental Assessment (NCEA), EPA Region 10, and the Surf Your Watershed program are storing their metadata in the growing EIMS collection.

EIMS is a repository of products and metadata. The descriptive information in metadata enables users to evaluate and use these products. EIMS stores and maintains descriptive information in a relational database and refers to the products (data, documents, etc.) stored either within EIMS or as distributed external files. This architecture supports the management of remote sensing data, geographical information system (GIS) coverages, and other types of data for which entry into relational tables is not appropriate. Descriptive information stored within EIMS is consistent with the Federal Geographic Data Committee (FGDC) metadata content standards for spatial data. A significant enhancement of these standards, however, is the addition of a hierarchical metadata framework that organizes detailed scientific data and documentation, and accommodates customized information at the catalog level to facilitate a review of the different types of metadata in EIMS. The EIMS repository of scientific documentation, accessed with standard web browsers, places a virtual library on the desktop of EPA staff and others with Internet access. Users can search within EIMS to find information sources of interest based upon topic or defined criteria related to types of environmental resources, geographical extent, date, or content origin. These user-defined searches typically are more efficient than currently used web search engines.

EIMS Records in the Office of Water (OW) Collection convey descriptive information about more than 70 OW information resources (databases, models, ...) utilized in support of OW activities. OW records in EIMS are available at http://www.epa.gov/eims/p_ow.html. More

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